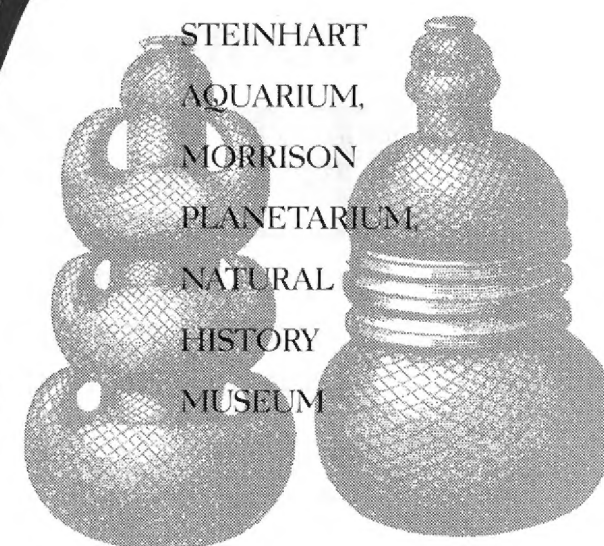




# ACADEMY

NEWSLETTER OF THE CALIFORNIA ACADEMY OF SCIENCES

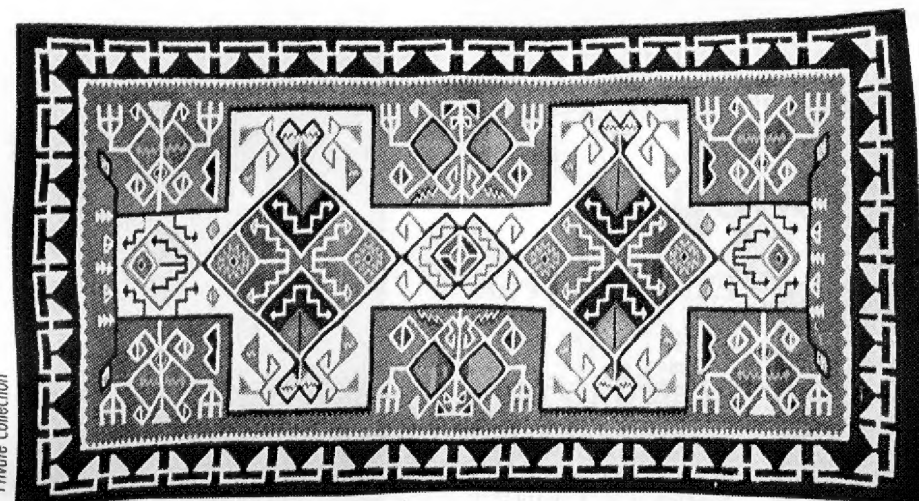
HOME OF  
STEINHART  
AQUARIUM,  
MORRISON  
PLANETARIUM,  
NATURAL  
HISTORY  
MUSEUM



## RUGS OF TEEC NOS POS: JEWELS OF THE NAVAJO LOOM

Feb. 22 through Sept. 27

**T**eec Nos Pos, meaning "Circle of Cottonwoods" in Navajo, is located in Arizona and was established as a trading post in 1905. In this remote part of the Navajo Reservation near the Four Corners, a distinctive pattern of rug weaving was born. Flamboyant shades of green, blue, orange and red saturate the intricate geometric designs in this woven art. *Rugs of Teec Nos Pos: Jewels of the Navajo Loom* in



The intricate patterns in these Teec Nos Pos rugs illustrate the extraordinary design of the Navajo weavers.

Linking Hall features approximately twenty-five rugs, the unique patterns of which have become the hallmark of southwestern style.

The rugs of Teec Nos Pos are as rich in historical significance as they are visually impressive. The display focuses on rugs dating from 1910 through the 1950s, all of which illustrate the extraordinary aesthetic and design of the Navajo weavers. The rugs have a Persian flair, possibly the result of

an early trader who circulated examples of this style among the area craftspeople. As such, they are a wonderful study in cross-cultural influence.

This exhibit will include examples of non-Navajo rugs for viewers to compare with Navajo ones of similar design. Also included in the display will be a number of works that show the individual creativity of Teec Nos Pos weavers, including pictorial and multiple pattern rugs, a chief blanket and a saddle blanket.

## FESTIVAL OF NAVAJO CULTURE

As a complement to *Rugs of Teec Nos Pos: Jewels of the Navajo Loom*, the Academy will host a celebration of Navajo culture with wood and stone carvings, beadwork, pottery and mud toys. These pieces are produced by contemporary Navajo artists, several of whom will be in attendance to discuss their work. The festival will be open all weekend during regular business hours.

Sat., Feb. 22 and Sun., Feb. 23 — 10 a.m. to 5 p.m.

## Take Pride in Yourself as a Volunteer!

The Academy relies on its volunteers to help the staff get things done. No matter what your skills or experience might be, there's something waiting just for you.

Main floor volunteers are always needed. If you'd like to volunteer for the AMBER exhibit, call right away. The orientations take place Tue., Feb. 11 at 1:30 or 6:30 p.m. Weekday or weekend duty shifts are available.

*Pacific Discovery* magazine needs a volunteer who can make a long term commitment to help with clerical work, and folks who could help develop web pages have been requested by several departments. Volunteers are also needed to help visitors make their selections in the Academy Store.

To find out more about these and other opportunities, call the Volunteer Office at (415) 750-7154 today!

## AMBER

WINDOW TO THE PAST

February 15 through April 15



Come witness the extraordinary workmanship of master amber craftsmen from St.

Petersburg as they demonstrate the same carving technique they used to replicate the Amber Room.

Sat., Feb. 15 and Sun., Feb. 16

Be sure to check the March newsletter for more carving demonstrations throughout the exhibit.

SPECIAL LECTURE

## A MODERN RENAISSANCE WITH AMBER

with Dr. David Grimaldi

Amber is one of the original precious substances, and was used for adornment and decoration thousands of years before jade, lapis or precious metals. The mystique of amber was legendary among the Etruscans, ancient Greeks and Romans, who carved deities and other objects from these petrified "tears of the gods." The first Renaissance with amber was in the 17th and 18th centuries, when Baltic amber was used by guilds of amber artisans in Prussia to create elaborate and intricate objets d'art — including the baroque masterpiece, the Amber Room.

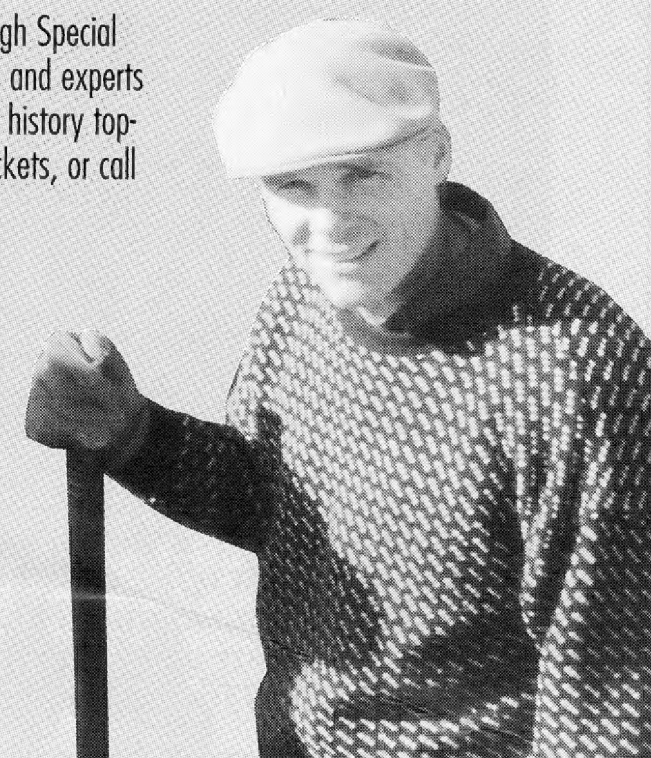
We are in the midst of a second Renaissance with amber, born from scientific discoveries. Amber is the fossilized form of tree resin, millions of years old. For several centuries it has been renowned as a preserver of prehistoric life with unmatched fidelity. It is only in the last five years that scientists have discovered amber's unique ability to preserve DNA — the genetic code itself — in fossils millions of years old.

As a complement to the *Amber: Window to the Past* exhibit (Feb. 15 through April 15), the Academy is proud to welcome Dr. David Grimaldi, curator of the exhibition and author of the companion volume. Dr. Grimaldi is also the curator and chairman of the department of entomology at the American Museum of Natural History, and an adjunct professor at the Center for Environmental Research and Conservation at Columbia University. In his lecture, he will present the natural history of amber from around the world, its use as a decorative substance with a history longer than virtually any other, and its role in current scientific inquiry as an unparalleled archive of ancient life. The lecture will take place in the auditorium, and will be followed by a book-signing with Dr. Grimaldi at 8:30 p.m.

Wed., Feb. 19 — 7:30 p.m. in the auditorium  
\$6 members/\$10 non-members.

Discover the natural world through Special Lectures, which features authors and experts speaking on a variety of natural history topics. Please use order form for tickets, or call (415) 750-7128.

Dr. David Grimaldi is curator of *Amber: Window to the Past*, and author of the companion book, now available at the Academy Store.





## Worms!

Here's an opportunity to meet some important animals that live beneath our feet. Join instructors Kevin Smith and Nicole Anderson Ellis as they examine worms under microscopes, study their anatomy and learn about their valuable role as decomposers. Participants will build a worm compost bin and bring two of these new friends home to start recycling.

Sat., Feb. 15 — 9 a.m. to noon  
Ages 9 to 12 years; \$25

## Lights, Camera, Documentary: Let's Go to the Dump!

Instructors Jack Laws and Marci Klane will share the basic nuts and bolts of video production. Participants will apply their new skills to produce a finished documentary about the world of conservation and solid waste management. The group will go on location to a Bay Area landfill, interview professionals, and document the workings of a site on video. Post-production work will take place at a San Francisco commercial editing facility before it is broadcast on Cable Channel 53. Each participant will receive a copy of the video.

Feb. 22 and March 1 — 10 a.m. to noon (at the Academy)  
March 8 — 9 a.m. to 5 p.m. (filming on location)  
March 15 — 9 a.m. to noon or 1 p.m. to 4 p.m. (editing)  
Ages 10 to 16 years; \$65  
(Space limited to 12)

## Pond Scum!

Ponds offer endless opportunities for exciting, hands-on discoveries. With instructor Paul Belz, we will do field study work in Golden Gate Park, examine conditions needed in ponds to support life, identify some of the more common groups of invertebrates that inhabit them, and see how animals need to adapt to survive in a pond.

Mon., March 31 — 1 p.m. to 4 p.m.  
Ages 6 to 8 years; \$25

The Junior Academy's spring calendar offers exciting science experiences for children ages 6 to 16 years. Please use the education catalog for registration and for other class listings, or sign up for the above classes using the newsletter order form. For more information about these and other Junior Academy programs, please call 750-7100.



## ARTIST-IN-RESIDENCE

### Puppets and Piñatas of Colombia

In the small village of Purisima, Colombia, Norita Gonzales learned to make pinatas and puppets from natural and recycled materials from her environment. As founder and director of Mascarita Puppet Theater Company, Gonzales writes, produces and performs bilingual plays for street festivals, museums and community programs. Gonzales will demonstrate the construction and creative process involved in puppet and pinata making.

Wed., Feb. 26 — 10 a.m. to 4 p.m. (Cowell Hall)

Visit with cultural artists from around the world as they demonstrate their crafts. Free after general admission. Call (415) 750-7165 for more information.



## PLANETARIUM

### FEBRUARY SKY SHOWS

Sky Show/Description	Weekday	Weekend
<b>1997 Almanac</b> closes March 9	2 p.m.	2 & 4 p.m.
<b>Other Worlds</b> planets beyond our solar system	—	1 & 3 p.m.
<b>Startalk</b> a tour of the night sky	—	noon
<b>Neighbors in Space</b> a family show	—	11 a.m.

On President's Day Mon., Feb. 17 the weekend schedule will be in effect for the holiday. Tickets can be purchased one-half hour before the show at the box office once inside the Academy of Sciences. (\$2.50 adults/ \$1.25 for youth and seniors). Members must redeem their passes for tickets at the box office prior to the show. For more information, please call (415) 750-7141.

## THE ORIGIN AND DIVERSIFICATION OF LANGUAGE

### The Third Annual Wattis Symposium

Now is the time to register for this year's Wattis symposium. The Academy has assembled a range of distinguished scientists from various disciplines to present the latest evidence on the origin, spread and diversification of language.

#### The ORIGIN & Diversification of



The eight principal speakers in the symposium will include: Dr. Peter Marler of the University of California at Davis speaking on "Animal Communication and Human Language," and Lord Colin Renfrew

of the University of Cambridge speaking on "Language and the Spread of Agriculture."

Early registration is strongly recommended as seating is limited. Please use order form for tickets. For a full symposium brochure with speakers and topics, please call (415) 750-7163.

Sat., April 12 — 9 a.m. to 5:30 p.m.  
(5:30 p.m. reception)  
\$35 members/\$45 nonmembers

## ★ ASTRONOMY LECTURE ★

### Making the Most of Comet Hale-Bopp



Comet Hale-Bopp

Early last year, observers were treated to the awe-inspiring sight of Comet Hyakutake. Now another frozen piece of cosmic matter,

Comet Hale-Bopp, has the potential to be just as impressive when it passes through the Solar System during the spring of 1997.

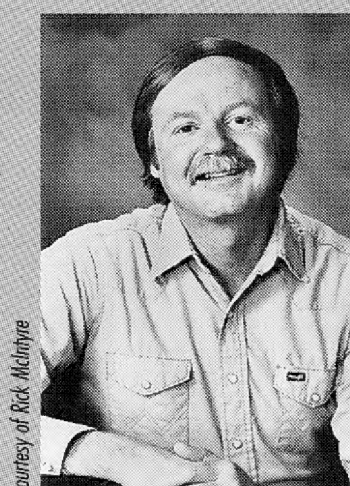
Dr. Alan Hale, co-discoverer of this comet, will discuss his comet, how viewers can best enjoy it, and how it fits into our overall view of the cosmos.

Tue., Feb. 25 — 7:30 p.m.  
(Morrison Planetarium)  
Tickets: \$3 each

The spring 1997 Benjamin Dean Lecture Series will continue on March 25 with Carolyn Collins Petersen on "Tales from the Comet Watch". For advance tickets, use the newsletter order form. Tickets may be available at the door on a standby basis. Call (415) 750-7127 for more information.

## MEMBERS

### Song the Wo



Rick McIntyre is the author of *A Society of Wolves*. His book details the near-extinction and reintroduction of wolves to the wild.

years. He also will discuss Arizona, New Mexico, and served as a consultant.

The lecture will include exterminate wolves in this tion projects underway in the ranger for 22 years, McIntyre Bend National Park in Texas Yellowstone in the summer. on the subject, and his lecture covered in his books *A Society Against the Wolf*. A book-signing will follow both lectures.

Tue., Feb. 11 — 2 p.m. and  
(A Tuesday instead of a Wednesday)

This program is a benefit of membership. Please present your membership card at both the front entrance and the auditorium. Members' guests can purchase tickets for \$10 each for adults and \$5 for children at the Membership Booth at the main Academy entrance.

Please note: Only the main entrance will be open for members lectures.

McIntyre will discuss the importance of wolves in the wild.

## SPECIAL

### The Earliest *Australopithecus*

Widely recognized as being closely related to humans, the *Australopithecus* species is often considered an important link in our evolution.

In collaboration with the L.S.B. Leakey Foundation, the Academy presents Dr. Alan Walker, professor of anthropology and biology at Pennsylvania State University. Dr. Walker will discuss recent findings on the *Australopithecus*, and their implications regarding our own lineage.

A wine and hors d'oeuvre reception will precede the lecture at 6 p.m. in African Hall. The lecture will take place in the auditorium, and will be followed by a book-signing of *The Earliest Australopithecus*.

Thur., Feb. 20. — 7 p.m. (6 p.m. reception)  
Lecture only \$6 members/\$10 nonmembers  
Lecture and reception \$30 members/\$35 nonmembers

### Between The Sacre

Suspended between their surrounding the capital of the the Colorado Plateau.

The unusual roundings, is related to *The Circle of the* humanity's place.

The lecture books on nonwestern the California In

pologist Dr. Mar  
Thur., March 27  
\$6 members/\$10

Discover the natural world through Special Lectures, which features authors and experts speaking



## MEETING

# g of lf with Rick McIntyre

is slide-illustrated lecture, McIntyre will examine the vior, history and impor- e of the wolf as a compo- of the natural wild ecosys- This prolific nature writer, was also a wolf interpreter llowstone National Park, discuss the successful rein- action of wolves into wstone. McIntyre has been ewitness to the project's nuing success, and person- egistered over 400 wolf ings over the past two wolf restoration projects in ap, where he lectured n 1995. the history of attempts to ountry, and wolf restora- e United States. A park e currently works at Big s in the winter and at He has written extensively re will draw on topics ety of Wolves, and *The War* ning at the Academy Gift es.

7:30 p.m.  
(Tuesday)



Photo by Rick McIntyre

## LECTURES

# Earth and Sky: d Ecology of the Tibetan and Colorado Plateaus

een earth and sky, the Tibetans and Native Americans are greatly inspired by gs and regard them as a model for their sacred way of life. Tibetans have named eir homeland "Lhasa," meaning "Earth of the Gods." Native Americans consider eau to be the center of the universe and their sacred world.

outlook on the relationship between matter and the spirit, humans and their sur- evant to all people. Peter Gold, author of *Navajo and Tibetan Sacred Wisdom: Spirit*, will be with us to discuss what we can learn from these ideas about in the natural scheme of things.

will be followed by a book-signing with the author. Gold is the author of several estern ways of life. He teaches on the Social and Cultural Anthropology faculty at stitute of Integral Studies in San Francisco, and was a research assistant to anthro- garet Mead.

— 7:30 p.m.  
nonmembers

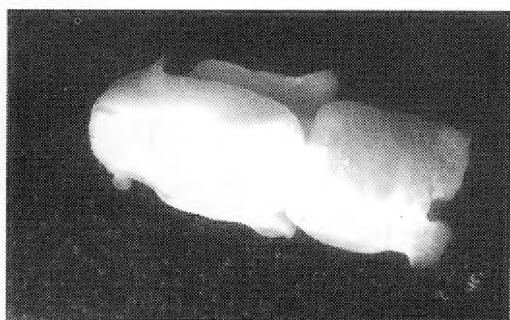
on a variety of natural history topics. Please use order form for tickets, or call (415) 750-7128.

## FELLOWS SCIENCE DAY 1997

# ALIEN SPECIES OF THE SAN FRANCISCO BAY-ESTUARY: HISTORY, CONSEQUENCES AND PROSPECTS

O n Sat., Feb. 22, the Academy of Sciences will hold its annual Fellows Science Day. This year's program concerns alien species of the San Francisco Bay-Estuary. Eight principal speakers will discuss the history and ecological consequences of the introduction of non-native plant and animal species to the bay-estuary system. These presentations will be followed by a round table concerning management of the alien species and the role of science in guiding that management.

Some of the principal speakers and topics will include: Dr. James Carlton of Williams College on "Biological Invasions in the Sea: the Global and Historical Context," Dr. Andrew Cohen of U.C. Berkeley on "Non-indigenous Animal Species of the San Francisco Bay-Estuary System," Dr. Michael Barbour of U.C. Davis on "Non-indigenous Plant Species of the San Francisco Bay-Estuary System," and Dr. Armand Kuris of U.C. Santa Barbara on "Biological Control of Introduced Marine Pests."



Native to New Zealand, this alien "seaslug" was found in San Francisco Bay.

The round table will include the principal speakers and three agency scientists, including Brenda Grewell of the California Department of Water Resources, Valerie Van Way of the California Department of Boating and Waterways, and Patrick O'Brien of the California Department of Fish and Game.

Sat., Feb. 22 — 9 a.m. to 4:30 p.m.

There is no charge for this symposium, and no reservation is necessary. We cordially invite all Fellows, students, colleagues, K-12 science educators and interested public to attend and participate in this Academy event. This symposium is made possible by the generosity of Fellows' annual giving to the Fellows' Research Fund. For more information, please visit our web site at [www.calacademy.org](http://www.calacademy.org) or contact Patricia Dal Porto at (415) 750-7351, FAX (415) 750-7298, email: [pdalporto@cas.calacademy.org](mailto:pdalporto@cas.calacademy.org).

## ADULT EDUCATION

# Winter Birds of the Klamath Basin

Join instructors Allen Fish and John Kean for a late winter tour of Tule Lake National Wildlife Refuge and adjoining refuges in Northern California's Klamath Basin, where the wildlife is rich and the land flourishing. Explorers will see large flocks of Tundra Swan, Snow and Canada Geese, and a variety of other waterfowl. The abundance of waterfowl draws a full spectrum of birds of prey to the Basin, including the largest winter concentration of Bald Eagles in the lower 48 states. We'll gander at Sandhill Cranes, scan for stealthy coyotes, prowl for owls and learning about a grand diversity of wildlife. Accommodations will be at the Red Lion Inn in Klamath Falls.

Pre-trip meeting: Thur., Feb. 20 — 7 p.m. to 9 p.m.

Trip: Feb. 27 — March 2

Cost:

\$275 members/\$300 nonmembers (double accommodations)

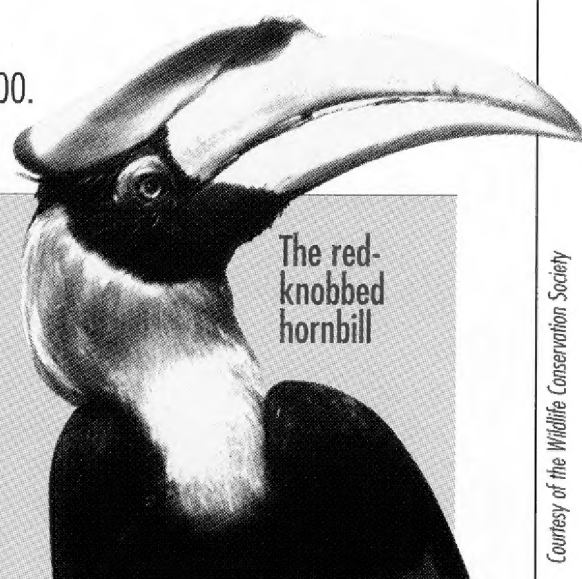
\$335 members/\$360 nonmembers (single accommodations)

(Includes accommodations, three box lunches, and transport from Klamath Falls to Tule Lake. Van transport from San Francisco to Klamath Falls and back available for an additional \$75.)

To register and for more information on these and other classes, contact the adult and family education program at (415) 750-7100.

## WILDLIFE CONSERVATION SERIES

# SAVING SUMATRA: LAND OF ELEPHANTS, TIGERS AND HORNBILLS



The red-knobbed hornbill

"Whoosh, whoosh, whoosh," is the sound of the giant red-knobbed hornbill's wings as it launches from its perch to scan the lush Indonesian canopy for fruits. As the birds glide high above the trees, they drop seeds throughout the forest, which sprout into new fruit trees. But the hornbills' farming techniques cannot keep up with the demand for timber from their Sulawesi home. In an effort to reverse this trend, Wildlife Conservation Society biologists Dr. Margaret Kinnaird and Dr. Tim O'Brien became the first to study the role of red-knobbed hornbills in the forest.

In 1992, Kinnaird and O'Brien set out to investigate the hornbill population within the Tangkoko-Dua Sudara National Park — a 22,000-acre sanctuary that harbors the largest group of hornbills ever recorded — along with macaques and other fruit eaters.

On Tue., April 8 Kinnaird and O'Brien will reveal the impact of human encroachment on rain forest dwellers, including the red-knobbed hornbills. They also will show how unchecked hunting and exploitation of forest products threaten the plants and animals of Sulawesi.

There will be a special cocktail reception at 6:30 p.m., giving you the chance to meet personally with the biologists. This lecture will take place in the auditorium and is part of the Wildlife Talks Series, co-sponsored by the Academy of Sciences and the WCS.

Tue., April 8 — 7:30 p.m. (reception 6:30 p.m.)

Lecture only: \$6 members/ \$10 nonmembers

Reception and Lecture: \$36 members/ \$45 nonmembers

For more information and tickets, call (415) 750-7128, or visit the WCS website on [www.wcs.org](http://www.wcs.org).

## YOUNG AUDIENCES

# A Family Affair

In celebration of Black History Month, Young Audiences presents Family Affair, an African American ensemble. This rousing musical group will appeal to the whole family with a lively performance to the beat of rhythmic drums. Colorful costumes and African instruments make the show as appealing to the eyes as its music is to the ears and hearts.

Sun., Feb 16 — 1 p.m.  
(auditorium)

This performance is part of the monthly series brought by Young Audiences to the California Academy of Sciences with a grant from San Francisco Grant for the Arts.



Family Affair



